What is claimed is:

CLAIMS

1. A semiconductor-based device processing apparatus comprising: a chuck for supporting a wafer; and

a barrier having a first position relative to the wafer wherein the first position relative to the wafer substantially facilitates etch uniformity for a chemically driven etch process, and having a second position relative to the wafer wherein the second position relative to the wafer does not interfere with the etch uniformity of an ion driven etch process.

- 2. The apparatus as recited in claim 1 wherein the barrier is moved to establish the first and the second position of the barrier relative to the wafer.
- 3. The apparatus as recited in claim 2 wherein the first position is substantially above the wafer and the second position is substantially below the wafer.
- 4. The apparatus as redited in claim 1 wherein the chuck is moved to establish the first and the second position of the bar<u>rier relative</u> to the wafer.
- 5. The apparatus as recited in claim 1 wherein the barrier surrounds the periphery of the wafer.
- 6. The apparatus as recited in claim 1 wherein the barrier is moved between the first and the second position using an actuator.
- 7. The apparatus as recited in claim 1 wherein the barrier has a third position.

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8. A plasma processing apparatus comprising:

a chuck for supporting a wafer; and

a moveable barrier having a first position and a second position, wherein the first position is capable of restricting diffusion of gases over the wafer within the plasma processing apparatus to the wafer.

The apparatus as recited in claim 8 wherein the plasma processing apparatus further comprises an actuator operable to move the moveable barrier between the first position and the second position.

The apparatus as recited in claim 7 wherein at least a portion of the moveable barrier is within 1/8 inches to 2 inches of the wafer when in the first position.

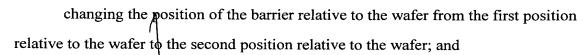
11. The apparatus as recited in claim 8 wherein the moveable barrier includes an opening.

12. The apparatus as recited in claim 8 wherein the moveable barrier shape is relative to the shape of the wafer.

13. The apparatus as recited in claim 12 wherein the moveable barrier shape is substantially circular.

14. A method for performing a multi-step etch within a semiconductor-based device processing apparatus, the semiconductor-based device processing apparatus including a barrier having a first position relative to a wafer facilitative of a first etch process and having a second position relative to the wafer facilitative of a second etch process, the method comprising:

performing a first etch process with the barrier in the first position relative to the wafer;



performing a second etch process with the barrier in the second position relative to the wafer.

- 15. A method as recited in claim 14 wherein changing the position of the barrier relative to the wafer is performed by moving the barrier.
- 16. A method as recited in claim 14 wherein the first etch process is a chemically driven etch.
- 17. A method as recited in claim 16 wherein the first etch process is a metal etch.
- 18. A method as recited in claim 16 wherein the second etch process is an ion assisted etch.
- 19. A method as recited in claim 14 wherein the first etch process is an ion assisted etch.
- 20. A method as recited in claim 19 wherein the second etch process is a chemically driven etch.
- 21. A method as recited in claim 14 further including a third etch.
- 22. A method as recited in claim 21 wherein the third etch occurs between the first and the second etch.

Trades